#### Town of



# AMHERST Massachusetts

OFFICE OF THE SUPERINTENDENT OF PUBLIC WORKS 586 SOUTH PLEASANT STREET

AMHERST, MA 01002

TEL. 413-256-4050 FAX 413-256-4054

## **Department of Public Works**

Fiscal Year 2005

This has been another good year for the Department of Public Works (DPW).

It was a relatively light year for construction compared to last year, with a normal New England winter. Twenty-six storms dropped a total of 71.5 inches of snow as measured at the Town's Waste Water Pollution Control Plant down in the valley – one less storm than last year, but 25 more inches of snow. Snow removal cost an average of \$3,948.72 per inch this year. If the weather pattern of the last five years continues, next year's snow fall should be less than 50 inches.

For the first time, probably ever, the Town completed street sweeping in the same fiscal year in which it was started. Sweeping was started in April 2005 and was completed on June 24<sup>th</sup>.

The 2004-2005 construction season started with a normal paving contract as All States Asphalt and Warner Bros. Inc. paved 3.4 miles of roadways. DPW crews then completed the Main and Lessey Street sidewalk project and continued the College Street sidewalk and drainage project. DPW crews then began and completed the Pleasant Way sidewalk and the Boltwood Walk sidewalks in preparation for the bigger downtown sidewalk project in early FY 06.

The transfer station has completed its first year of operation and has shown that it can be a self-supporting enterprise. This is possible because the final debt payment on the opening of Cell #3 will be made next year. The old landfill across Belchertown Road has reared its ugly head as an issue that needs to be resolved with the state Department of Environmental Protection (DEP). The first phase of the Intermediate Site Assessment has been accepted by DEP, and the second phase will begin in FY 06.

In addition to our construction work, the DPW continued its efforts to support the Town's goal of reducing our impact on the environment. The Water and Waste Water divisions continued to upgrade their infrastructure. The Department completed its second full year of using Bio-diesel fuel in its diesel vehicles. The DPW fleet is now 49 % alternative-fueled. There are 3 electric GEM cars, one propane vehicle, one hybrid SUV and 26 Bio-diesel fueled vehicles.

The DPW is continuing to reinforce its relationship with other Town departments and the Schools. This year the DPW took on the sewer pump problem at the Munson Library. This required removing the old system that allowed sewer gases to escape into the basement of the library, as well as excavating a section of the basement floor and installing an E-one pump system. This job was completed on time and with only 5 days of interruption to the programs in the library.

As funds continue to be tight and prices rise, the DPW will continue to look for ways to conserve Town resources and build and enhance the relationships between the DPW and the rest of the Town while improving our response to the community.

Guilford B. Mooring II, P.E. Superintendent of Public Works

## **CONSTRUCTION AND MAINTENANCE**

The personnel of the Highway Division, in addition to their normal maintenance work, completed the following projects during FY 05:

## **HIGHWAY RESURFACING**

The following streets and roads were resurfaced, shimmed or reclaimed this year between July 2004 and November 2004, for a total of 3.4 miles. In addition to using Chapter 90 funds, the shaded streets were paved as part of the Middle Street Sewer extension project. The DPW also reclaimed and resurfaced the driveway to Well #4, the transfer station yard and the DPW yard.

Reclamation 3"			Length (ft)	Width (ft)
Fearing St.	Entire		2406	26
	Presidential			
North Pleasant St.	Apts.	Pine St.	3000	31
East Pleasant St.	Strong St.	Tilson Farms	3800	32
East Hadley Rd.	Town Line	WhippletreeLn.	1500	30
*Mountain View Cir.	Entire		600	24
*Mechanic St.	Entire		1515	20
Overlay 2''				
Old Farm Rd.	Rt. 9	Wildflower Dr.	4850	28

<sup>\*</sup>paid for from the Sewer Fund

## SIDEWALK AND STORM DRAINAGE PROJECTS

## **College Street**

The College Street drainage and sidewalk project continued. The following work was completed:

New granite curb	725 ft
New concrete sidewalk	440 ft
48 inch box culverts	90 ft
Drain pipe	94 ft
Drain structures	6 ea
Relocated fire hydrants	1 ea

## Main & Lessey Street

This project was completed this year.

New granite curb	1062 ft
New concrete sidewalk	622 ft
Drain pipe	284 ft
Drain structures	3 ea
New Street Lights & conduit	7 ea

## **Pleasant Way**

This project was started and completed in the fall.

New granite 160 ft

New concrete sidewalk 130 ft X 10 ft

New street lights & conduit 7 ea

Various street fixtures

#### **Boltwood Sidewalk**

This project was started and completed in the spring.

New granite 158 ft New concrete sidewalk 250 ft New street lights & conduit 6 ea

#### **OTHER PROJECTS:**

- 1. Cherry Lane retaining wall and 30 ft of 36 inch box culvert
- 2. Utility services for Park and Recreation Garage
- 3. Removed Groff Park restrooms
- 4. Installed new sewer pump for Munson Library
- 5. Installed new sidewalk for Munson Library

## TRANSPORTATION IMPROVEMENT PROGRAM (T.I.P.)

The following TIP projects are underway as of this year:

- 1. Design of the Atkins Corner intersection improvements
- 2. Design of Meadow Street bridge replacement (MassHighway)
- 3. Design of East Leverett Road bridge replacement (MassHighway)
- 4. Design of Main Street bridge replacement (MassHighway)

## **SANITARY SEWER DIVISION**

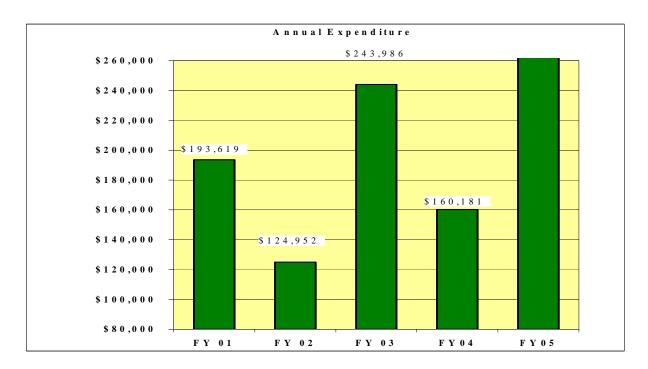
#### **SEWER MAINTENANCE**

The Division investigated 82 sanitary sewer complaints and corrected 12 stoppages in the collection system. Approximately 20 miles of sewer mains were cleaned and flushed. Problematic sewer locations are flushed and cleaned on a quarterly basis. The DPW, in conjunction with Dukes Inc., chemically treated more than 3,000 feet of sewer line for root intrusion.

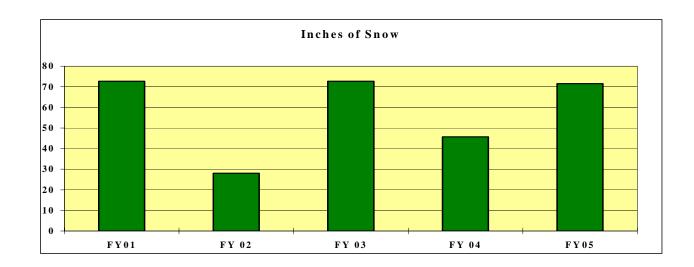
John Field

Highway Division Supervisor

## **SNOW AND ICE REMOVAL**



There were 26 snow and ice storms, with a total of 71.5 inches of snow. 6705 tons of sand were used. 2188.48 tons of salt were used. 13300 gallons of Ice Band Magic were used on the roadways and sidewalks.



Year	Cost	Snow (inches)	No. of Storms
FY 01	\$193,619	72.7	21*
FY 02	\$124,952	28.0	17**
FY 03	\$243,986	72.7	39***
FY 04	\$160,181	45.7	27
FY 05	\$282,334	71.5	26

## TREE AND CEMETERY DIVISION

The Tree Division removed a total of 112 street trees during the past year. Trees removed were: 5 silver maple, 5 red maple, 33 sugar maple, 11 American elm, 5 white ash, 2 white birch clumps, 1 cherry, 5 hemlock, 1 spruce, 2 white pine, 1 Norway maple, 1 flowering cherry, 4 arbor vitae, 1 apple, 1 mountain ash, 2 European beech, 5 birch, 5 ash, 1 sycamore maple, 4 oak, 2 red oak, 1 butt log, 1 blue spruce, 12 juniper and 1 basswood.

During FY 05, 8 trees were planted.

54 tree stumps were removed.

In addition to tree care responsibilities, this department, consisting of three full-time employees and one part-time summer employee, is also responsible for the care and maintenance, including burials, at the West, North and South Cemeteries.

#### **Burials in FY 05**

West Cemetery	1
North Cemetery	12
South Cemetery	6

#### **PARKS DIVISION**

The Parks Division of five full-time employees and two part-time summer staff continue the day-to-day maintenance of our parks and commons, together with the maintenance of twenty-three softball, baseball, football, lacrosse and soccer fields and many multi-purpose areas.

#### **Special Projects:**

- 1. The Plum Brook project was bid for an early construction start but has been delayed over various issues.
- 2. The Groff Park restrooms have been removed and the new facility is in the permitting process.

As I mentioned in previous reports, continued heavy use of all our fields and facilities requires increased maintenance, due to continued wear and tear, and major renovations will undoubtedly be required at some of our facilities in the very near future. To facilitate the proper planning of this work, an existing facility study was conducted of Town and School recreation areas.

<sup>\*10</sup> Additional snow/ice events of less than 1" occurred, which required sanding operations only.

<sup>\*\*3</sup> storms with no accumulation

<sup>\*\*\*7</sup> Additional snow/ice events of less than 1" occurred, which required sanding operations only.

## **WATER TREATMENT & DISTRIBUTION**

**Water Consumption:** The average daily water consumption for FY 05 was 3.59 million gallons; the peak day, September 10, 2004, was 4.533 million gallons. The total FY 05 rainfall was 47.84 inches, slightly above the 42-inch annual average.

The figures below summarize the amount of water pumped, the revenue generated and the chemicals used to treat the water. Chlorine, ozone and ammonia are used for disinfection. Potassium permanganate is used for iron and manganese removal at Well #4. Polymer is used for water treatment at the Atkins and Centennial water treatment plants. Fluoride is added at a level of 1 part per million to reduce tooth decay and sodium hydroxide is used to elevate the pH of the water for corrosion control. In spite of increased development, water consumption continues to show a decrease over the last 10 years as shown in the graph below.

## DAILY WATER CONSUMPTION IN MILLION GALLONS

## **Water Services**

	FY 03	FY 04	FY 05
New services installed	26	42	38
Total water services	6,269	6,301	6,338
# Meters Replaced	229	285	298

## **Chemical Usage - All Sites**

Chlorine (lbs.)	15,998	16,439	16,998
Sodium Hydroxide (gals.)	16,735	16,990	16,253
Polymer (gals.)	2,463	2,425	2,528
Potassium Permanganate (lbs.)	1,029	503	694
Ammonia (lbs.)	3,444	3,748	3,537
Sodium Fluoride (lbs.)	23,185	22,395	21,900
Ozone	1,384	959	1,242

**Monthly Pumping in Million Gallons** 

Month	FY 03	FY 04	FY 05
July	123.894	122.854	111.982
August	123.977	109.941	110.368
September	124.138	120.953	120.672
October	117.570	118.100	112.629
November	109.672	107.239	108.949
December	102.175	102.492	107.013
January	95.161	96.615	99.592
February	109.458	112.699	107.711
March	112.257	110.154	107.519
April	114.008	114.466	109.123
May	117.837	117.530	109.859
June	97.613	102.725	106.067
Total	1347.76	1335.77	1,311.48
Daily Average	3.69	3.66	3.59
Maximum Daily	5.14 (8/14/02)	4.773 (5/15/04)	4.533 (9/10/04)
Minimum Daily	2.355 (12/26/02)	2.007 (12/26/03)	2.532 (1/09/05)

	FY 03	FY 04	FY 05
Wells #1 & #2	197	152	142
Well #3	341	394	395
Well #4	118	55	78
Well #5	34	10	10
Pelham Reservoirs	259	305	283
Atkins Reservoir	396	416	404
<b>Total Water Pumped</b>	1,347	1,335	1,311
Average Daily (millions)	3.69	3.66	3.59

**Water Consumed – Cubic Feet** 

vater consumed cubic rec			
	FY 03	FY 04	FY 05
UMass	57,884,900	59,227,600	50,948,600
Amherst College	4,720,400	5,298,200	5,998,300
Hampshire College	2,478,800	2,642,000	3,028,400
Town	91,705,600	68,919,900	91,725,500
Municipal	1,356,300	1,160,300	1,293,000
Special Water Readings	1,659,300	272,200	476,900
Other	329,900	290,800	156,900
Un-metered Use	5,000,000	5,000,000	5,000,000
Adjustments	(182,900)	(339,200)	(1,184,700)
Total Metered (ft <sup>3</sup> )	159,952,300	143,150,200	157,544,900
Total Metered (million gals.)	1,200	1,071	1,168
% Unaccounted	10.5%	19.8%	12.2%

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**Total Revenue – Dollars** 

	FY 03	FY 04	FY 05
UMass Water	\$1,064,359	\$1,300,790	\$1,112,074
Sewer	\$986,480	\$1,026,973	\$900,600
Amherst College Water	\$88,252	\$114,786	\$129,515
Sewer	\$92,112	\$103,391	\$117,016
Hampshire College Water	\$46,774	\$57,835	\$66,303
Sewer	\$48,356	\$51,539	\$59,065
Town Water	\$1,629,715	\$1,427,760	\$1,598,297
Sewer	\$1,560,742	\$1,236,499	\$1,375,642
Municipal Water	\$27,575	\$27,599	\$30,326
Sewer	\$26,184	\$22,450	\$25,139
Special Reading Water & Sewer	\$60,208	\$19,725	\$23,490
Adjustments Water & Sewer	(\$25,926)	(\$12,877)	(\$83,506)
Other Water & Sewer	\$12,549	\$11,443	\$6,001
Total Revenue	\$5,617,380	\$5,387,913	\$5,359,961

## **WATER QUALITY DATA:**

**Bacterial Samples:** Bimonthly samples were analyzed from 27 sites around town and all samples were negative for coliform bacteria.

**Fluoride**: Fluoride was added to all sources at a level of 1.0 ppm to prevent tooth decay.

**Treatment Plant Performance:** Both the Atkins (Shutesbury) and Centennial (Pelham) Water Treatment plants produced water that met the requirements set by the Environmental Protection Agency (EPA). The average turbidity from Atkins was 0.09 N.T.U. and from Centennial 0.09 N.T.U. The EPA requires that these readings be less than 0.3 N.T.U. in 95% of the samples. Total Trihalomethanes, a byproduct of chlorine disinfection, averaged 28.5 ppb from quarterly sampling at eight different sites around town. The EPA limit is 80 ppb. Haloacetic acids, another by-product of chlorine disinfection, were also analyzed quarterly at 8 different locations and the average value was 41.7 ppm, well below the EPA limit of 60 ppm.

**Water Rate:** The water rate for FY 05 is listed below.

0 - 10,000 cu. ft.	\$2.00
10,001 – 100,000 cu. ft.	\$2.10
100,001 cu. ft. or more	\$2.20

The average cost to an Amherst resident, based on an annual usage of 120 HCF, is about \$244/year. This is well below the state average of \$321, and 74% of water utilities in the state have higher rates than Amherst.

**Cross Connection Program:** The cross connection program was established in 1989 under Massachusetts Drinking Water Regulation 310 CMR 22.22 to prevent cross contamination of the water supply with hazardous substances. Water Department staff tests these devices twice annually.

Total Backflow Devices

	FY 03	FY 04	FY 05
Town	51	55	55
UMass	357	361	378
Amherst College	77	94	96
Hampshire College	26	25	25
Commercial	99	109	112
Residential			
Total	610	644	666

**Chemical Analysis:** The following water tests were recently analyzed. All levels of substances in the water were below the Maximum Contaminant Level set by the Safe Drinking Water Act. More information is available online at <a href="https://www.amherstma.gov">www.amherstma.gov</a>

- -Volatile Organic Compounds Solvents, Petroleum Products
- Inorganic Compounds tested annually at all sources
- Fluoride daily at all sources
- Synthetic Organic Compounds herbicides and pesticides 3/4/03 at all sources
- Arsenic
- Perchlorate
- Radioactive Substances
- Lead and Copper

## **SPECIAL ACTIVITIES**

- **A.** <u>Water Distribution:</u> The complete distribution system was flushed in the spring of 2005 to remove any sediment and improve water quality. We are continuing with an aggressive water meter replacement program and have to replace all meters in excess of 15 years old. Water mains were extended by the developer for the Amherst Hills subdivision (71 homes) on Station Road. All major water meters were calibrated and tested in August.
- **B.** Wells #1 & #2: The Town contracted with Davenport Construction of Greenfield, Massachusetts to complete a major rehabilitation of Wells #1 & #2, at a cost of \$310,254. This included a new chemical feed building and piping changes.

The R.E. Chapman Company of West Boylston, Massachusetts was also contracted, at a cost of \$54,220, to replace the pump and motor and chemically clean the well. Department of Public Works staff did all the electrical work, including new switchgear, variable frequency drive and all wiring and controls.

- C. <u>Centennial Water Treatment Plant</u>: Tighe & Bond, consulting engineers of Westfield, Massachusetts, was contracted by the Town to design a new control panel for the treatment plant. The plant was shut down in June, and the new computer-based system is expected to be completed in August. A study was also completed by Tighe and Bond to investigate changes to the facility for the purpose of improving treatment to meet upcoming federal regulations regarding pathogen reduction, and by-products of disinfection.
- **D.** East Pleasant Street Water Storage Tank: The Town contracted with T.C. Painting of South Deerfield, Massachusetts at a cost of \$23,326 to pressure wash, prime and repaint the tank. The peripheral drain screen was also replaced.
- **E.** <u>Distribution System Leak Survey:</u> J.B.F. Inc. of Queensbury, NY conducted a leak survey of the entire distribution system, using a digital computer correlator and ground microphone. Six leaks were located and repaired. The distribution system was found to be in very good condition.
- **F. GIS Mapping:** The Water Department is working towards updating its water records to digital format. A laptop computer has been set up so that employees in the field can access plans of the water system.
- **G.** <u>Water Conservation:</u> The University of Massachusetts has contracted with Johnson Controls Inc. of Windsor, Connecticut to investigate and install water conservation devices on campus. It is expected to reduce campus water consumption by about 20%. The implementation of the program will be completed in FY 06, but preliminary water consumption data show a definite reduction.
- H. Watershed Land Management: The Town has now completed both a timber inventory and management plans for its properties in Amherst, Pelham and Shutesbury. Planning began in FY 05 to put in place a selective timber harvesting and management plan. Invasive plant infestations were also located and will be properly dealt with.
- **I.** <u>Education:</u> The Hitchcock Center for the Environment has again this year provided training on water conservation and groundwater protection in grades 2, 4 and 5 of all schools in the Amherst/Pelham school system.

Robert E. Pariseau Director of Water Resources

## WASTEWATER TREATMENT PLANT

#### **Flow Data**

The Wastewater Treatment Plant treated 1.53 billion gallons of wastewater in FY 05. The highest daily flowrate recorded was 12.9 million gallons, on 9/18/04.

	FY 03	FY 04	FY 05
Inches of Rainfall	45.23	51.45	47.84
Average Daily Flow in Million Gallons	4.15	4.44	4.21
Highest Day in Million Gallons	11.0 (3/21/03 & 4/11/03)	15.1 (9/23/03)	9.19 (1/14/05)
<b>Chemicals Used</b>			
Chlorine (lbs.)	12,775	11,840	11,575
Polymer (lbs.)	2,963	2,687	2,837
Potassium Permanganate (lbs.)	3,795	2,475	2,640

Chlorine is used to disinfect the wastewater prior to discharge into the Connecticut River. Polymer is used to thicken sludge as part of the disposal process. Potassium permanganate is used for odor control.

## **Treatment Efficiency**

The water that is discharged into the Connecticut River is tested in our treatment plant laboratory. Many process control tests are performed to optimize treatment and produce the best quality effluent possible. The Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (DEP) monitor our activities and measure our effectiveness by the parameters listed below (annual averages). No violations of our EPA discharge permit occurred in FY 05.

Parameter	EPA Limit	FY 03	FY 04	FY 05
<b>Biochemical Oxygen</b>				
Demand (mg/L)	30	12.8	13.1	13.0
<b>Total Suspended</b>				
Solids				
(mg/L)	30	3.5	3.7	3.2
Chlorination (mg/L)	1.0	0.55	0.47	0.44

## **Septage Received**

The treatment plant receives septage from residential septic tanks pumped from the towns of Amherst, Pelham and Shutesbury. Below is a summary of the number of septic tanks (usually 1000 gallons) that were pumped.

Town	FY 03	FY 04	FY 05
Amherst	136	132	121
Pelham	48	58	44
Shutesbury	67	85	86
Total	251	275	251

## **Sludge Data**

Sludge is the residual organic material left after the wastewater is treated. We currently thicken these solids on-site, and Casella Waste Management is under contract to deliver the liquid sludge to an EPA-approved sludge incinerator. Sludge in FY 05 was transported to three incineration facilities: Fitchburg, MA; Millbury, MA; Cromwell, CT and to the solid waste incinerator in Springfield, MA.

Sludge Data	FY 03	FY 04	FY 05
<b>Total Gallons</b>			
(transported)	3,638,000	3,711,200	3,537,600
<b>Total Dry Tons</b>	1,100	1,080	1,030
% Solids	7.3%	7.0%	7.0%

Month	Total	Ave. %	Total	Dry Tons
	Gallons	Solids	Dry Tons	Per Day
July	224,500	6.9	64.8	2.1
August	207,000	7.1	61.2	2.0
September	323,000	7.4	99.6	3.3
October	347,000	7.2	104.0	3.4
November	323,500	7.1	95.7	3.2
December	292,500	7.2	87.5	2.8
January	211,900	7.3	64.6	2.1
February	346,800	7.1	102.0	3.6
March	360,100	6.9	103.0	3.3
April	354,500	6.6	97.9	3.2
May	348,300	6.7	96.9	3.1
June	198,500	6.8	56.5	1.9
Total	3,537,600		1,033.7	
Average	294,800	7.0	86.1	2.8

## **Power Consumption**

	FY 03	FY 04	FY 05
Avg. kWh/month	108,558	96,577	1,04,300
Avg. kW demand	227	230	

## **Special Activities:**

- **A.** <u>Sewer Master Plan</u>: Camp Dresser and McKee of Boston, Massachusetts completed a sewer master plan in FY 05. This document was approved by the Select Board and will serve as a guidance document for future sewer extensions.
- **B.** <u>Chapel Road, Southeast and Mechanic Street Sewer</u>: This sewer project and pumping station were completed and connections began after 7/1/2004.
- **C.** <u>Amherst Hills Project</u>: A new 73-house sub-division began construction in East Amherst. About 31 houses will be connected to a new pumping station on Station Road.
- **D.** Water Reuse Project: UMass completed construction of a facility adjacent to the wastewater treatment plant that will receive and further treat the effluent by sand filtration and reverse osmosis. This ultra-pure water will be used as make-up water at the existing power plant. If this pilot project is successful, the plant will be part of the design of a new power plant due to be constructed in 2007.
- **E.** <u>Sewer Maintenance</u>: Staff at the treatment plant has continued to improve the preventative maintenance of the collection systems. A schedule of sewer flushing, degreasing and root control has greatly reduced the number of blockages in the collection system.
- **F.** <u>Vulnerability Report</u>: Applied Risk Management of Boston, Massachusetts, completed a detailed study and report outlining the vulnerabilities and proposed counter-measures needed to secure the Town's wastewater facilities.

## **G.** Treatment Plant Improvements:

- 1. Three new variable-frequency drives were installed by Town staff on the aeration motors to save energy and to optimize the oxygen level in the tanks. The Town also installed three (3) new dissolved oxygen meters and a programmable logic computer to control the oxygen level in the tanks.
- 2. Treatment Plant staff also replaced the primary skimmings grinder #2 and associated piping and control panel.
- 3. Roof repairs were completed on the lower roofs on the main building to stop leakage. A new membrane, flashing and ballast were installed.
- 4. Town staff manufactured and installed four (4) aeration tank drainage valves.
- 5. Plant staff designed and manufactured a treatment unit to remove grit and stones from the water discharged to the plant from the sewer flushing truck.
- 6. Plant staff continued to grout and seal numerous large manhole leaks to the sewer collections.
- **H.** <u>Miscellaneous Sewer Projects:</u> Camp Dresser and McKee of Boston, Massachusetts has begun design of the following sewer extension and repair projects:
  - Shay Street
  - Sunset Court
  - McClure Street
  - Red Gate Lane

- Orchard Street
- Gaylord Street
- Market Hill Road

**I. GIS Improvements:** Work is continuing by Town staff to integrate all plans and records into its GIS mapping system. All data generated by pumping station daily checks is now entered into a hand-held computer and downloaded at the main plant.

Robert E. Pariseau Director of Water Resources

## **SOLID WASTE AND RECYCLING**

Change in the Solid Waste and Recycling area continued as the primary theme for FY 05. Transfer Station improvements, the new Municipal Recycling Facility (MRF) contract, commodity markets, and fuel costs have each had an impact on the Town of Amherst's Solid Waste and Recycling Division's efforts. The good news is that the facility can run as a self-supporting enterprise next year.

The Department of Public Works has continued upgrading the Transfer Station's functionality, cleanliness and appearance. A new digital scale display enables DPW workers to track flow of materials even when the Transfer Station is closed. The computerized checkout at the Transfer Station continues to be popular with both businesses and residents. The scale linkage with the computer allows customers to be "weighed in and out" and generates income. The new paving cuts down on wind-borne dust and reduces dust accumulation, making it easier to keep the area clean in the good weather and plowed in the winter.

There have been a few changes and additions to the Transfer Station programs this year. The Transfer Station staff began separating clean wood and asphalt, brick and concrete from the waste stream into special areas at the Transfer Station. The Transfer Station will now accept up to 10 gallons of paint and paint products (at two dollars per equivalent gallon) any day it is open. Businesses or residents with larger amounts of paint need to make appointments.

The Commonwealth of Massachusetts has promoted the removal of "sharps" from the waste stream through the use of DOT-approved sharps containers. The Town applied for and received \$2,250 to purchase sharps containers and establish a revolving fund to cover the costs of the containers and disposal costs. Residents may purchase and return one-quart and five-quart sharps containers and return them for disposal to the Transfer Station.

The Municipal Advisory Board (MAB) negotiated an advantageous ten-year contract for management of the MRF with Recycle America. As of April 2005, the Town of Amherst and the other Western Massachusetts municipalities will be paid \$15 per ton for all recycled materials brought to the MRF, in addition to the current profit-sharing agreement. Unfortunately, rising fuel costs are taking an increasing chunk out of the income from the new MRF contract.

Higher prices in the global commodities markets continued allowing the Town to negotiate better contracts for scrap metals. The Town increased its tonnage of both scrap metal and electronics collected this year. In FY 05, the amount of scrap metal collected was increased by 7%, from 194 to 209 tons. The number of electronics recycled increased by 23%, from 17 to 22 tons. The Town has also been exploring ways to take Styrofoam and related materials out of the waste stream.

Curbside pickup of trash and recyclables continues to be provided by private trash haulers. This fiscal year, almost five hundred households received variances to Pay as You Throw (PAYT), which allows them to use pre-paid bags for their trash and bring their recycling and trash directly to the Transfer Station. Information about Amherst's trash and recycling, including the curbside pickup calendar and PAYT continues to be found on the Town of Amherst web site: <a href="https://www.amherstma.gov">www.amherstma.gov</a>. The Earth Machine and New Age composters,

kitchen counter pails and recycling bins continue to be available for purchase at the Transfer Station.

The Recycling Center supports fifteen recycling programs, which divert materials from disposal in a landfill. Clothing (Salvation Army ), rechargeable batteries, waste oil, mixed containers, mixed paper, leaves and Christmas trees are all accepted at no charge. The Take-It-or-Leave-It and book shed areas continue to be very popular, with considerable flow of incoming and out-flowing of materials and books.

Fluorescent bulbs of all shapes and sizes, brush, electronics, household solid waste, construction and demolition waste, scrap metal, household hazardous waste (HHW), paint, tires, appliances and propane tanks are all accepted for recycling and disposal after payment of fees. The programs listed below show the types and amounts of materials recycled from FY 02 through FY 05.

	FY 02	FY 03	FY 04	FY 05
Chipped Brush/Leaves (tons)	536	310	397	62
Electronics (tons)	12.4	12	17	22
Scrap Metal (tons)	292	176	194	209
HHW in household equivalents	145	216	210	183
Paint (gallons)	945	1301	996	1,079
Tires (count)	556	410	636	678
Appliances	600	557	543	705
Propane Tanks	98	190	220	247

Marlene Barnett Recycling Coordinator